CLAIMS

Please amend the claims to read as indicated below.

1. (Original) A method of directional radio communication between a first station and a second station, the method comprising the steps of:

determining at the first station a set of one or more beam directions which are feasible for use in transmitting a signal from said first station to said second station using a signal received from said second station;

selecting at said first station at least one of said beam directions for transmission of a signal from said first station to said second station, wherein the selection of the at least one direction for transmission is such that successive signals or groups of signals are transmitted in substantially different directions and such that on average each beam direction available to said first station is used a substantially equal number of times.

2. (Original) A method as in claim 1, wherein the direction of transmission from said first station to said second station is selected randomly from said set of feasible directions in a first random selection step.

3. (Original) A method as in claim 2, wherein a second selection is made from the set of feasible directions if the first selection step selects a direction used in at least one preceding signal transmission.

4. (Original) A method as in claim 3, wherein a further random selection is made from the feasible directions if the second random selection also indicates a direction used in at least one preceding signal transmission.

5. (Previously presented) A method as in claim 3, wherein the direction selected is used whether or not it is the same as a direction used in the at least one preceding signal transmission.

6. (Original) A method as in claim 1, wherein the at least one direction for transmission is selected from the set of feasible directions according to predetermined rules.

7. (Original) A method according to claim 6, wherein the at least one direction for transmission is selected by selecting the next feasible direction to that used in the preceding transmission.

8. (Original) A method as in claim 7, wherein the selection process for successive transmissions steps through the set of feasible directions in a first direction.

9. (Original) A method as in claim 8, wherein the selection process for successive transmissions steps through the set of feasible directions in a second direction opposite to the first direction when a predetermined boundary is reached.

10. (Original) A method as in claim 6, wherein signals are transmitted such that the directions selected alternate respectively from one side of the preceding direction to the other side, at least a predefined angular spacing from said first direction being maintained in each instance.

11. (Original) A method as in claim 6, wherein a reference direction is defined and subsequent signals are transmitted such that the directions selected alternate respectively from one side of the reference direction to the other side, at least a predefined angular spacing from said reference direction being maintained in each instance.

12. (Previously presented) A method as in claim 1, wherein the at least one direction for transmission is selected for a given signal burst in a code division multiple access system.

13. (Previously presented) A method as in claim 1, wherein the at least one direction for transmission is selected for a given time slot in a time division multiple access system.

14. (Previously presented) A method as in claim 1, wherein the at least one direction for transmission is varied within a signal burst such that the at least one direction for transmission is selected for a component part of a signal packet or a time slot.

15. (Previously presented) A method as in claim 1, wherein one beam direction is selected for the transmission of a signal from said first station to said second station.

16. (Previously presented) A method as in claim 1, wherein more than one beam directions are selected for the transmission of a signal from the first station to the second station.

17. (Original) A method according to claim 16, wherein two beam directions are selected for the transmission of a signal from said first station to said second station.

18. (Original) A method according to claim 1, wherein at least one direction is selected for successive groups of signals and each group of signals comprises a predetermined number of time slots.

19. (Original) A method according to claim 1, wherein at least one direction is selected for successive groups of signals and each group of signals comprises a predetermined number of signal packets.

20. (Original) A method according to claim 1, wherein at least one direction is selected for successive groups of signals and each group of signals comprises a predetermined number of component parts of a signal packet or a time slot.

21. (Previously presented) A method according to claim 1, when used in a network comprising a plurality of network elements comprising at least a plurality of said first and second stations, said selection step additionally taking into account at least one network criteria and/or at least one network element criteria.

22. (Original) A method as in claim 21, wherein the selection step takes into account interference density in one or more directions.

23. (Original) A method according to claim 21, wherein the selection step takes into account power loading conditions of components within said first station.

24. (Original) A method as in claim 23, wherein the selection step takes into account instantaneous power loading conditions of components within the first station.

25. (Original) A method as in claim 23, wherein the selection step takes into account average power loading conditions of components within the first station.

26. (Original) A method as in claim 23, wherein the selection step takes into account the bit-rates of multiple users connected to said first station.

27. (Previously presented) A method according to claim 1, wherein the selection step takes into account the traffic conditions the or each direction.

28. (Previously presented) A method according to claim 1, wherein the selection step takes into account the statistical loading of the or each direction.

29. (Previously presented) A method according to claim 1, wherein the selection step comprises allocating one or more directions a priority rating based on additional criteria taken into account, said selection step favouring directions with highest priority.

30. (Original) A method as in claim 29, wherein directions which have a low statistical use are allocated a greater priority than directions which have a relatively high statistical use.

31. (Previously presented) A method as in claim 1, wherein said second station at least influences the selection made by the first station.

32. (Previously presented) A method as in claim 1, wherein said first station is a base station.

33. (Previously presented) A method as in claim 1, wherein said second station is a mobile station.

34. (Currently amended) Apparatus for directional radio communication between a first station and a second station, the apparatus comprising:

a circuit that determines ~~means for determining~~ a set of one or more beam directions which are feasible for use in transmitting a signal from said first station to said second station using a signal received from said second station; and

a circuit that selects ~~means for selecting~~ at said first station at least one of said beam directions for transmission of a signal from said first station to said second station, wherein the selection of the at least one direction for transmission is controlled such that successive signals or groups of signals are transmitted in substantially different directions and such that on average each beam direction available to said first station is used a substantially equal number of times.